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ALFIERI.

The Italian Poet, Vittorio Alfieri, was born at Asti, in Piedmont, in the year 1749. Though descended from an ancient family, and enjoying many opportunities for improvement in his childhood and youth, he long showed great indifference to learning, and seemed destitute of the taste and good sense which are displayed by many a person in less favorable circumstances.

He was educated at Turin: but, on leaving that city at the age of sixteen, he appeared to have gained little or nothing by the course of study; and, while on his

travels in different countries afterwards, he took no pains even to become acquainted with any foreign language. It would not be difficult to conjecture how his time was employed: as such neglect of duty, and such a disrelish for the enjoyments of the mind in a youth, too often and too certainly intimate deep rooted habits of vice.

Alfieri was twice in England in the early part of his life: where his conduct was marked with immorality. In 1775, having returned to Turin, he there became attached to a lady, and began to write

poetry. Her influence appears to have soon changed both his taste and his habits: for he began to apply himself to the studies which he had so long neglected. He was encouraged to this course by the success which attended his first efforts at composition. This, as is too often the case, were made public by means of the stage. He wrote two plays, which were performed with great applause: entitled *Cleopatra* and the *Poets*: the latter a satirical drama.

In the course of a few years he made extraordinary progress in Latin, French and Italian; and in less than seven years published fourteen dramas and several works in prose and poetry, of different kinds, among which were a translation of Sallust, and a treatise on tyranny. He married the princess of Schomberg, widow of Charles Edward, the last man who claimed the title of a prince of the house of Stuart. In company with her he visited France, and was in Paris during the prevalence of some of the horrors of the Revolution. Although he was obliged to abandon much of his property in leaving that city, he hastened away, and it was sequestered, sold and irrecoverably lost. From that time he retained a violent antipathy towards the French people until the day of his death.

He now again devoted himself to study; and, what is quite remarkable, began to acquire the Greek language at the age of forty-eight, and actually translated several works from it into Italian. Had his youth been moral, and the course of education in Italy, such as it should be in every Christian nation, Alfieri might have risen to an eminence far higher than he, or any other Italian poet ever attained. Although greatly admired by those who overrate the drama, and depreciate solid literature, with the sound principles and Christian truth on which it is founded, Alfieri merits no very exalted place among great writers. Indeed it is impossible, or next to impossible, that the human intellect should ever attain a magnificent growth amidst

the ignorance and darkness, the false religion, the puerile superstitions and the gross immorality of such a society as Rome fosters and perpetuates wherever her influence prevails. Men may now and then arise who can utter pleasing conceits, or even a few beautiful or sublime conceptions in harmonious language; or some branch of science or literature, not prohibited by law, may find devotees to do themselves honor, and render service to mankind: but more than this is not to be expected, and more may be looked for in vain, even among the most celebrated writers of Italy, in past or present days.

Alfieri is said to have shortened his life by severe study. He died at Florence in 1803. He wrote his own life, which was published in two volumes; and in 1804 appeared his posthumous works, which were printed in Florence, though bearing London on the title page. His widow afterwards erected a statue to him by Canova, in the church of Santa Croce.

We have room for only a short specimen of the style of this author, and select a few lines in one of his favorite departments, satire: an epigram on editors.

*Epigramma del Conte Alfieri.*

Dare, e tor quel che non s' ha  
E una nuova abilità:  
Chi da fama?  
I Giornalisti.  
Chi diffama?  
I Giornalisti.  
Ma chi sfama  
I Giornalisti?  
Gli oziosi, ignoranti, invidi, tristi.

*The Battles of the Rio Grande.*—The official returns of Gen. Taylor, show the number of Americans killed in both actions to have been 48; wounded 127. This is somewhat less than before reported. Gen. T. estimates the Mexican loss at about 1000 in killed, and missing. The Mexican General himself sets it down at 755.

*The Grotto of Posilipo.*—This far-famed grotto is simply a tunnel, about half a mile long, cut through a solid rock and under a hill, to connect, in earlier ages, Pozzuoli and Naples.



*From the Cincinnati Gazette.*

### BUDDING FRUIT TREES, &c.

To be successful in budding Fruit Trees, the operator should always be careful to be provided with a proper budding knife, which can be obtained at the different seed stores. The stock or tree to be worked should be in a good condition, which is when the rind or bark parts freely from the wood, with the knife, and is free of sap. The buds should be selected from free-growing wood of the current year, and be full and plump; and, like the stalk, partly free from the wood—for if either the rind of the bud or tree is mutilated by the operation, the success will be doubtful: if the rind of the bud is too young and tender, it is liable to shrivel, and will never unite to the alburnum of the stock; and hence many buds are annually lost by the rind of the bud springing from the stock instead of uniting to it.

The time of budding fruit trees is from the beginning of July to September. The Plum and Pear will be in order first; the Cherry and the Apple follow; and lastly, the Peach and Nectarine. Many persons adopt the rule of budding the Pear and Cherry early, in order, in case of a failure, to have a second chance; and it is generally a good method, although in some cases early budding of those trees causes the bud to start into growth, instead of lying dormant, which is an objection, as they make feeble wood and are sometimes winter-killed. In either case, moist, cloudy weather is preferable for the operation, and the morning and the evening to that of the middle of the day—particularly in *hot, dry weather*, for the sap of the bud often dries up during the operation, which is detrimental. Budding should always be done in a neat, expeditious manner.

*Practice of Budding.*—When the shoots for the buds are taken from the tree, the leaves are to be taken off, leaving a part of the foot-stalk of the leaf with the bud—this is essentially necessary—because the leaves, if left on the shoot after being cut from the tree, would exhaust the bud and cause it to shrivel. The scions should be kept moist by wrapping around them wet paper, old matting, grass or any other substance, until they are inserted.

There are various methods of inserting buds; but I shall confine myself to

the most general and I believe most successful method; which is to choose a clear place in the tree, and making an incision in the form of the letter T, by first cutting through the rind in the top, in a transverse direction; the lower incision is made by drawing the point of the knife either upwards or downwards from the upper incision about an inch—this is a nice point in budding trees, as the edge of the knife ought to go just through the rind and no further, for if the alburnum is cut through into the wood, which will be the case if cut too deep, the operation will be uncertain; because the very part which is the most delicate and which is to unite to the inner rind, being mutilated will not be united to the bud properly, and will most likely prove a failure. This being done, apply the thin end of the haft of the knife to the top of the incision in order to part the rind from the wood, which is done by gently lifting the top of the rind from the wood and running the end of the haft downwards on each side to the end of the incision, being careful not to mutilate the alburnum of the stock in the operation, but leave it in a clean, neat manner.

The incision being made for the reception of the bud, the next thing to be done is to prepare the bud, by placing the scion in the left hand, between the thumb and finger. The knife is then to be placed a half an inch below the bud, with the heel of the blade, which is carefully drawn upwards a half an inch above the bud, cutting it out with about half the wood and bark. This being done the part is placed between the thumb and forefinger of the left hand, and the rind gently pressed back with the edge of the knife, when the wood is to be pinched between the thumb and knife, and divided from the rind with the bud, which is to be inserted neatly in the incision, by pressing it gently down between the bark and the wood of the stock, cutting off the top above the transverse cut, so that the bud fits in a compact manner. Then apply moss, matting or other soft string, and bind it neatly, by beginning below the ligature, and bringing it to the top, leaving the end unbound, but be careful that every other part is securely bound, so as to exclude the sun and air from drying up the bud before it is well united.

E. SAYERS.

#### FOUR-AND TWENTY HOURS AT SMYRNA.

BY A LADY.—(See p. 453.)

*A Caravan.*—We were watching a group of Turks who were supping together—each one partaking in turn of a greasy ball of rice, which was administered to him by the head of the party, whose green turban distinguished him as a descendant of the prophet—when an exclamation from one of our companions attracted our attention to a caravan that was crossing the bridge.

The procession was headed by a little, sober-looking donkey, unburdened, and without saddle or bridle, which led the way with great sagacity; and notwithstanding his humble appearance, we were assured that, without his assistance, the drivers would have found it impossible to have induced the camels to proceed. Next came a long and almost interminable line of those huge animals, walking in single file with that slow undulating movement which is so peculiar to their species; they were heavily loaded, and each one was mounted by his master, who guided him merely by the voice. The long train, with its gay eastern dresses, had an admirable effect as it wound under the trees and across the bridge; it was altogether in perfect keeping with the landscape. We watched them till the last camel, of which there were some fifteen or twenty, had disappeared, and then we also crossed the bridge, in order to explore the cemetery.

*The Turkish Burial Ground.*—The distance was but short which separated the haunts of the living from the dwelling of the dead: yet scarcely had we penetrated a few steps into those thick shades, when we found ourselves shut out completely from all sight or sound that told of human life, and in the very midst of that most awful of all desolation—a solitude peopled with the ashes of those who were and are not! Around us on every side, dark and silent, rose an interminable forest of gigantic cypress-trees, so closely grouped, that even the light of day could scarcely penetrate amongst them, and spreading on and on in unbroken gloom, till the eye became bewildered in attempting to limit their empire; and beneath, yet more interminable, yet more and more silent, lay the forest of tombs, each cold white stone strangely distinct in the surrounding darkness, and yet so innumerable, so thickly strown upon the

earth, that a chill struck on the heart at the thought of how immense was this population of the dead. There was not a sound: for the summer breeze, passing through the unbending branches of the cypresses, drew no murmur from those mournful trees, and the slanting rays of the setting sun, as they shot at intervals across the graves, made the turbaned monuments look, in the faint glimmering light, like the pale phantoms of the departed, each one watching over his own slumbering ashes. We sat down among the tombs to wait the termination of sunset, whose influence we felt in the deepening shadows round us; though it was rarely that we caught a glimpse of that fading glory, or of the softer light of the rising moon, whose silver crescent, appearing among the trees, amply compensated for the entire absence of twilight. Monsieur V — read to us the inscription on one of the graves near us, whose highly gilt monument and painted turban seemed to indicate that the dust it contained had once been honored of men. It stated that this son of the faithful had, throughout a long life, so perseveringly performed all the outward acts of devotion in which the religion of the Moslem consists, that he was most assuredly wandering even now with the dark-eyed houris by the shores of that lake where lie the sparkling bowls filled with the water of immortality. To me, in that vast abode of the dead, which in its deep stillness seemed so far removed from the hopes and fears of human life, it was quite painful to be recalled by this pompous panegyric to the gross and lowering ideas with which the Mahomedans have clothed even the heaven of their dreams; for their creed does not allow the soul to disengage itself from the trammels of the flesh, even in their hope of an immortality beyond the grave. It is a very characteristic trait of this people, the care with which a little basin is scooped out on the stone of every grave, to catch the rain-water, that the birds may come and drink; thus carrying out their principle of universal charity even after death. We left the cemetery as soon as it was dark, passing once more through the merry groups who were proceeding homewards, each one carrying his little paper lantern to light his steps as he went along.

*The Bazaars.*—Before six o'clock the next morning we were all astir, anxious to accomplish what we could in the short time allotted to us. We proceeded first to the bazaars, in search of some of the beautiful



Smyrniote embroidery, which is nowhere else to be found. These bazaars are as spacious as they are interminable, and their shops displayed the produce of every part of the globe. We entered into several of them, finding each furnished with its Persian carpets, and comfortable cushions placed round the wall, where we were invited to sit and drink coffee as long as we chose. But the most interesting sight, where everything was new and picturesque, were the traders who had come from the interior of the country, and who, with their singular dresses, wild gestures, and strange dialect, attracted much of our attention as they stood in groups round the seats of the money changers, or at the stall of the public weigher—his balance and weights being in constant requisition for the grains and spices which formed the principal part of their merchandise.

*A Mosque.*—I was very anxious to gain admittance into a mosque, which is as difficult in Smyrna as it is easy in Constantinople; and accordingly proceeded to one of the largest, in hopes of being able to effect an entrance with the help of Monsieur V—. Numbers of Turks were collected on the wide steps which lead to the three principal doors, and round the fountains, where they performed their ablutions before daring to enter within the sacred precincts. As soon as we had passed the railing which enclosed the outer court, they hurried towards us, with the evident intention of opposing our further progress. Monsieur V— addressed them in Turkish; and for some time his utmost eloquence was only met by the most angry refusals; at last, however, they consented, with very surly looks, to admit us, provided we would take off our shoes; nor would they even allow us to substitute slippers, as is the custom at Constantinople. None of the party were disposed to undergo the penance of walking in this manner by the stone stairs excepting myself; and I therefore entered alone, but not until each of the Turks had separately knelt down to ascertain that I really had, in all sincerity, complied with their request.

The mosque was extremely large, divided into three compartments, the centre of which was the most sacred, and separated from the others by a few low steps. At the east end, much in the same position as the altar in Christian churches,

was a representation of the tomb of the prophet, and near to it was a sort of pulpit, from which a portion of the Koran was read every day. From the vast dome-shaped roof hung a long rope, supporting innumerable little glass lamps, and various strange-looking ornaments—such as ostriches' eggs, horses' tails, &c.; and in the centre were inscribed the seven names of God in Turkish, Persian, and Arabic, forming a large circle of gilt letters. The floor was entirely covered with those beautiful little carpets of which even one is considered a treasure elsewhere.

A few early worshippers were scattered here and there, bowed towards Mecca, with their foreheads touching the ground; and, difficult as it is to attract the attention of a Turk when engaged in his devotions, my entrance roused them all. They stared at me for a moment in utter amazement, and then simultaneously starting from their knees, crowded round me, vociferating and even throwing themselves on the ground, to ascertain if I had not already desecrated their sanctuary by walking as though on common ground. The mullah, through whose influence I had been admitted, came to my assistance, and showed them that I had left my shoes outside, upon which they returned to their places, though with looks of great discontent.

I was standing near the principal door, which was wide open, and so large, as to afford a view of the interior of the mosque from the street; at that moment a Frenchman, who was on board of the same steamer with ourselves, happening to pass by, saw me there, and imagined that any one might enter at will. He therefore came up the stairs, and had advanced to the door, when he was observed by a man, apparently belonging to the mosque, who was sweeping the carpets. I suppose he was already exasperated at my presence; but he had scarcely perceived this new intruder, than he uttered a howl of rage, and seizing a pole which stood near, he ran at him with it in the most ferocious manner. The attack was so sudden and so determined, that the poor Frenchman had no time to collect his ideas; he ejaculated one faint "Misericorde!" then tumbled head-foremost down the stairs, and disappeared in a whirlwind of dust.

## THE SOLDIER'S HOME.

The outward appearance of a barrack, as it has existed in this country for many years, must be familiar to all our readers. A high wall, into which is let a gateway, and possibly, if the station be an important one, a postern also, intervenes between the road or the street and the barrack-square; which, whether it be surrounded on three sides by houses, or contain only a single row fronting the main entrance, is fenced about, and gravelled or laid down in grass; so that it may be fit for the recruits to drill and the regiment to parade. There is nothing repulsive in this; but the reverse: neither will the external appearance of the men's quarters disgust you; for the house is built of brick, and the roof is slated. But come forward and observe how the interior is laid out. That mass of building on which you are gazing contains three rows of dormitories, and nothing else. There is not a day-room in it; and the kitchens, or cooking-places, besides that they stand a good way apart, are supplied with no conveniences whatever beyond boilers and grates thrust beneath them. The walls, originally whitewashed, are very dingy—so are the ceilings. The brick-flooring on the ground story is in ruts; the wooden staircases are by no means in a good state of repair, and the boards are stained with grease. Come up this flight of steps and enter the apartment on the right of the landing-place: it is a sort of saloon, wherein iron bedsteads are arranged in two rows, each row having the heads of the beds to the wall. They are all rolled up at this moment, and the bedding of each is folded; but at night they are let down—and then—while the lateral space between each pair does not exceed a foot and a half—from foot to foot there may be an interval of perhaps an ell. There are shelves, as you must notice, running longitudinally over the head of each row, whereon the men place their knapsacks and caps; and the firelocks are arranged in racks against the wall, having pouches, bayonets, and belts slung beside them.

The room in which we stand is the home of twelve men. Here they eat, sleep, and dress—as far as any of them can be said to dress under cover—and here sometimes they cook also. Here likewise, in bad weather, the washing of

their linen takes place; and as the soldier's *kit* is not very extensive, the operation is going on continually. Their cooking, whether it be performed over the fire yonder, or in the sort of shed or outhouse which is dignified by the title of the "men's mess kitchen," they themselves take it by turns to execute. So it is also in regard to the cleaning and sweeping of the chamber, which first takes place at an early hour in the morning, and is afterwards repeated at the termination of each meal. Now as the whole of the inmates, except the fatigue party, must turn out in order to let the process go on, and as they have no place to retire to, let the weather be as inclement as it may, much inconvenience, leading to worse things, is continually occasioned. Take the first turn out—that which occurs early in the morning—and see to what it leads.

There is not in the soldier's apartment a jug, a basin, a foot-tub, or any other convenience, of which civilized men generally make use. There is not in any barrack, which we happen to have visited, a bath-house or lavatory under cover. The men, however, must wash their faces, hands, and feet ere inspected—wherefore away they rush in a body to the pump, as soon as the bugle sounds. It may, rain, snow, hail, blow; but there, in the open air, they must make their toilets: and when that job is completed, it very seldom happens that the sleeping-room is in a fit state to receive them back. What are they to do?—Stand and shiver, and get their garments and shirts wet through, and lay the foundation of catarrhs, and, it may be, fevers!—for remember they have just jumped out of bed, and that even in the depth of winter the soldier's rooms are generally overheated. They cannot do this. Therefore they move off one by one to the only place of shelter that stands open for them, and begin the day with paying a visit to the canteen. Now the canteen is a public house—and soldiers are no more proof against temptation than other men; and there is an awkwardness in sitting or standing in a tap-room without calling for something: and so some through established custom, others because their comrades set the example, call for their glasses of gin. A single glass of gin, even when taken upon an empty stomach, may not make a man



drunk, but it gives a false excitement to his system, which requires, as soon as counteraction begins, to be stimulated again; and this leads of course to a habit of tippling; if indeed it do not bring its victim muddled to guard or parade, and so transfer him from the ranks to the black-hole, and from the black-hole to the provost prison. Can anything be worse than this? Yes: another and a more fatal result often follows. If the man pass muster at the guard parade, he is just as likely as not to go on drinking as soon as the immediate danger of detection seems to be past; and, at all events, whether on duty or not, there are ten chances to one that he who thus begins each day degenerates by degrees into a drunkard. But a drunken soldier is a ruined man. There is not only an end to all his chances of good-conduct-stripes, and so forth, but he is sure to commit crimes, sooner or later, that involve terrible consequences; and his entire degradation, when it comes, the looker-on will be able to trace back to the first drop of gin in the canteen.—*Quar. Rev.*

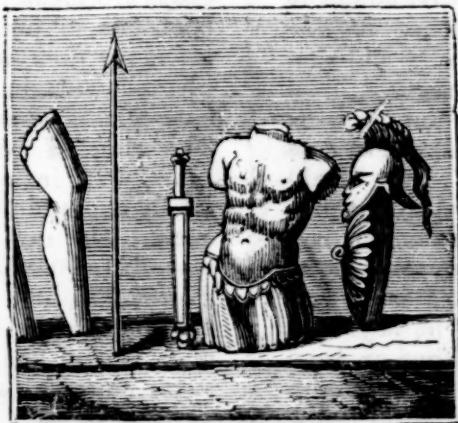
*Sugar in the United States* is a subject of increasing interest. The demand is rapidly advancing. Its production in the state of Louisiana, to which it is here principally confined, is a source of much wealth. The capital employed in that state is \$52,000,000 with 40,000 hands and 10,000 horses, and the average annual manufacture of sugar more than 80,000,000 lbs., and 4,000,000 gallons of molasses. The cane crop in the U. S. one year (1842), was an average one, and the whole aggregate sugar crop of the year was 142,445,199 lbs., though near 13,000,000 less than in 1840. Our imports in 1840 were of brown sugar, to the value of \$4,742,492; white or clayed, \$838,458. But there was exported of refined sugar to the value of \$1,214,658. It is thought a supply of sugar for home consumption might be produced in the U. S. The consumption in the U. S. in 1830 was about 70,000 tons.

The product of a hand on a sugar estate is put down at the cultivation of 5 acres, producing 5,000 lbs. of sugar, and 125 gallons of molasses. The value of the sugar on the spot is 5½ cents a pound, and the molasses 18 cents a gallon; total, \$297.50. The annual expense per hand, tools, &c., \$105. Two

crops are made in succession on the same land, one of plant-cane, and one of ratoons; it then lies fallow two years, or is planted with Indian corn or peas. An acre yields about 12,00 lbs. of sugar. The state of Louisiana has 700 plantations, 525 in operation, producing annually about 9000 hogsheads of 1000 lbs. each. The raw sugar imported in 1840 was 121,000,000 lbs. valued abroad at \$5,600,000, and imported from 6 different countries. This, with our own product, is over 263,445,000 lbs. But maple sugar constitutes in addition a large proportion of our domestic consumption, amounting annually to 8 or 10 millions lbs. The protection afforded by a tariff has greatly increased the production of sugar in the U. S. From 1816 to 1828 this increase was from 15,000 to 45,000 hogsheads.

*The annual consumption of sugar in Great Britain* in 1830 McCulloch estimated at 180,000 tons, or over 400,000,000 lbs., which was about 30 lbs. for each person. The consumption is rapidly increasing there and on the continent, where the annual consumption is 260,000 tons. The British West India Islands yield about 195,000 tons. Other West India Islands, 200,000, and Brazil, 75,000. During the first half of the last century the consumption increased *five-fold*. The sum total of sugars brought into all the markets has been estimated for 1838 at 738,000 tons, but the present average quantity produced of all kinds may be estimated, in round numbers, at one million of tons. Great Britain employs, according to an English account, 200,000 tons of shipping in the exportation of 500,000,000 of lbs. of sugar from her colonies, which, if consumed by her twenty-eight millions of people, would be equal to 25 lbs. each; but this is so taxed that the poor can get but a fraction of this proportion, as the revenue from this is annually \$22,000,000. The British imported, in 1831, from their East India possessions, 485,326 cwt., costing from 22 to 35s. with a duty of 24s. Notwithstanding the large amount imported, Mr. Huskisson has said that "two thirds of the poorer people drink their coffee, without sugar."

Short reckonings make long friends.  
The longest day must have an end.  
A good servant makes a good master.



## ANCIENT ARMOR.

This print is a copy from an old gem, drawn and described by Calmet, in the appendix to his dictionary. He says: "1st are the leg-pieces, which not only cover the legs pretty low down, but also the thighs up above the knee; 2d, the spear stuck in the ground; 3d, the sword, in this instance in its sheath; 4th, the cuirass, or defence of the body; this appears to be made of leather, or some other pliant material, capable of taking the form of the body; 5th, the shield, upon which, in our gem, is placed, 6th, the helmet, with its flowing crest."

He describes the Roman helmet as small, short, and fixed. The Grecian differed, in being larger, and also moveable, so that the front of it, which usually was worn level, on being pulled over the face during the time of combat, became a defence to the face, the wearer being able to see through holes formed in it, accommodated to the situation &c. of his eyes. "I pretend not accurately to ascertain the shape &c. of Hebrew helmets. It is clear in general, that this piece of armor was considered of the utmost importance, and as a principal means of personal safety."

*Progress of the Choctaws.*—The Choctaws, who have earned for themselves so much credit by the establishment of schools in their own country, and who have bestowed so liberally of the tribe-means to the great cause of education, continue to press forward in their noble course. The example they have set to other tribes is worth more than the expenditure; and the improvement, socially, morally and religiously, among themselves is priceless; it cannot be estimated. Their policy in this particular will be an enduring monument to their forecast, and at some fu-

ture time they will receive, as they will deserve, the gratitude of those that will profit by their example.

This people are sowing, in other respects, the seed of prosperity. I have samples of cotton, and cotton and woolen cloth (linsey) manufactured by them, that make very good ordinary clothing, and such as I have often seen worn in Pennsylvania. They have shown, in an improvement in their legislative body, a sagacity and sense of justice infinitely creditable. The tribe is divided into three districts, one of which is much the most populous, and larger than the others. So long as their council or legislature was in one body, the smaller districts complained that the larger one controlled every movement, and overshadowed them. To silence this discontent, the strong district had the good sense and good feeling to agree that the legislature or council should consist of two bodies, in one of which each of the districts should be represented in its corporate capacity, on the principle of our Senate, as a counterpoise to the inequality in the other branch.—*Commissioner of Indian Affairs.*

## MAXIMS AND PROVERBS.

Birds of a feather flock together.  
Confidence is the companion of success.  
Division and contention are upheld by pride.  
Exalt wisdom and she will promote thee.  
Fugitives fear though they be not pursued.  
Humility is the foundation of virtue.  
In order to learn, we must attend.  
Misfortune is a touchstone of friendship.  
Possibilities are infinite.  
Poverty craves many things, but avarice more.  
Retire sometimes for sober consideration.  
Set not too high a value on your own abilities.

Those of our readers who have solved Enigma No. 16 (p. 464), must have smiled at our expense. We did not examine it until it had been printed. No. 15 is *Robert Fulton*.





## BALANCING THE BODY.

The whole subject of balancing is curious and worthy of particular attention and study. It embraces the principles upon which levers operate; those machines which, under various forms, are not only in our hands every day, but are represented by every moveable bone in our bodies. A man of science, who had made human anatomy his peculiar study, once remarked, that he often contemplated in silent awe, the forms of his friends as they moved or stood before him, reflecting on the adaptation of the complicated parts, and the hundreds of muscles, tendons and bones, which require to be operated upon at each step, and even to hold the frame motionless for a single moment. The effects upon the blood-vessels by the alternate pressure and relaxation of the muscles during motion, and the favorable influence which exercise thus exerts, as an aid to the labors of the heart, and a promoter of the health; the beauty of form produced by symmetrical arrangement, and the wonderful power which the Creator has lodged even in the small muscles of a single finger; all these are points which increase in importance to our view, the more we comprehend and reflect upon them.

The following remarks we select from Mudie's 'Popular Guide to Observations on Nature,' pages 102-3:—

"Ants have six legs, quadrupeds four, and man only two; so that man needs more exertion of his body to balance himself than the quadruped, and the quadruped more than the ant. The man too is upright, and even the quadruped is higher in proportion to its breadth than the ant. Thus the centre of gravity

swings by the longest lever in the man in proportion to his whole weight, and by the shortest in the insect; and thus the man is more affected by the position of the surface on which he walks than the quadruped; and the quadruped is more affected in that way than the insect. Where the ground is perfectly level, the man's path is nearly straight; but if the ground rises to the one hand, the path always takes a twist to the other, because the foot which is on the high ground throws the centre of gravity the other way, and the other foot is advanced towards the low side, in order to support the centre of gravity, and keep the body steady; and as long as the one side of the ground continues higher than the other, the track continues bending towards the low side. If the ground again becomes level, the path, if not counteracted by observation and design, goes on the last direction of the body, how different soever that may be to the direction of the path on former level ground; and if the ground begins to slope the other way, a bend in the other direction takes place, unless where observation prevents it. Any one who looks at footpaths, not designedly made, even when they lead across the common from one well known and often frequented spot to another, will see that they are made a great deal upon those mechanical principles, and not only so, but when there is, upon ground having side slopes, a beaten track on the grass by the side of a perfectly straight artificial walk, the effects of this natural balancing of the body may be seen. It does not require hills to produce them, for the ground immediately at the sides of the

track may be perfectly level, and yet the track as much twisted as if every little swell extended onward and rose to a great mountain. A slope forwards or backwards does not produce similar effects; but when there is an increase, and at the same time a twist in the ascending slope, the natural paths of men, and even of large quadrupeds, have generally twists there, and twists which are very dangerous for wheeled carriages in moving rapidly. In the early ages of English history, men and horsemen, and pack-horses, appear to be the only engineers in road making; and as, in a horse with a rider or load, the centre of gravity is higher, and consequently swings more than in an unloaded horse, those twists at the double curvature of the steep hill occur in many places where the old line has been preserved, and among other places, just near the top of Highgate Hill; and it is a fact, that though those twists are dangerous for carriages, they are easier for those who walk, or ride slowly, than if the road went straight up.

"Any one may convince himself of the truth of these effects of the centre of gravity by trying to run in a horizontal direction round a hill, without getting farther from the summit or centre of the hill; or how difficult is it to run round on the slope of a circular basin or hollow without getting nearer to its centre or bottom. If the battlements of a circular tower which has no parapet, slope outwards, it is not only difficult but highly dangerous to walk fast round them; but if they slope inwards, they are safer and more easy than if one was walking in a straight path having the same width. Upon a similar principle—though there the forward motion of the centre of gravity has more to do in the matter—if a circular turn in a road slope outwards, a coach, if moving rapidly, is apt to be overturned or the passengers flung off towards the outside; but if, on the contrary, the road at such a place slope inwards, it is safer than if it were level. On this principle, coaches are much more endangered by passing rapidly loops of road at the hips of hills, than similar loops at the heads of valleys. Thus, we perceive that there is no little information even in that which to those who "see things but do not look at them" appears to be a merely accidental path, and that should lead us to be careful to "look at everything we can

see;" and if we once do that, we are independent of the lessons of other people.

"But we further see that there is, in the nature of the surface over which we proceed, a tendency to turn us from the purposed direction of our path; and if we do not observe the variations of surface which act mechanically upon our centre of gravity, and occasion these deviations from the straight line, we never can get to our intended place by the shortest road—and very often we cannot get to it at all. The inequality of our steps increases this tendency to deviate; for if, upon level ground, we take short steps with one leg, and long steps with the other, it is altogether impossible for us to keep the straight line; and if we are on a slope, it is just as impossible for us to prevent ourselves from curving down that slope, if we do not take short steps with the higher leg and long steps with the lower; and if we would gradually climb the slope with the least exertion, the higher leg must take little mincing paces while the lower leg takes strides. Here there are some beautiful morals; but we have no time to bring them out; only we shall remark, that, as in walking, so in living and in learning, there is a gravitation in us; and if we do not, by careful observation, adjust it to the circumstances through which we have to come, our path not only becomes crooked, but we are always getting lower down; and that the grand cause of the crook and the descent is, over-exertion of our higher foot: our ambition strides away; our industry cannot keep pace with it; and down we come.

"Both those causes of deviation operate upon the man who tries to cross the foggy moor ignorantly; that moor shelves in all directions, and he knows not how to counteract the shelvings; and as little does he heed the differences of path or the regulations of his paces, so as to adapt himself to these. But the man who is intimately acquainted with such places finds out those matters; and let the moor be ever so wide, and the fog ever so dense, he knows the direction of the place where he wishes to go, sets his face directly towards it at the outset, and attending to his own steps, and to the form of the surfaces over which he passes, he accomplishes his purpose with ease and certainty."



From "*Algeria and Tunis, in 1845.* By Capt. J. CLARK KENNEDY." 2 vols.

Algiers will disappoint those who look for what Eöthen calls "the splendor and havoc of the East," by its increasing resemblance to a provincial French town, "with arcades and shops, fitted with the latest Parisian fashions." The Kasbah, however, or fortress in the upper town, where, of old, the Dey was but meanly lodged, bears traces of past dynasties. It can still show its desolate harem, its fountain with twisted columns and inscriptions from the Koran, its empty treasury, rifled of an amount of riches exaggerated into something fabulous. The British consul, too, Mr. St. John, occupies one of "the finest remaining specimens of Moorish domestic architecture in Algiers," during the winter and spring months, having merely introduced there the Englishman's delight and the German's horror, chimney fires, and turned out divans and cushions for Christian chairs and tables. The flat roof is left, with which an English consul may be trusted; such a trust not being an unimportant one. If the following paragraph be correct, it contains a characteristic trait of the conquerors as well as of the natives:—

"From the second floor a staircase in marble and porcelain leads up to the terraced roof, a delightful lounge in the cool of the evening, after the exhausting heats of a summer's day. Upon these terraces it was the custom for the women to appear shortly before sunset to enjoy the evening breezes, without veils, and frequently but slightly clad; the men by a sort of tacit agreement, not joining them till after dusk, on account of each house-top being overlooked by, and also overlooking the neighboring premises. The infraction of this rule by the French officers on the first occupation of the city, nearly led, in some instances, to very serious results, the feeling of exasperation being much greater at seeing a man peaceably promenading on his own roof, armed with a telescope, than that produced by the actual presence of an invading army within their walls."

The first move taken by our traveller from Algiers was in a *diligence* for Bleedah; where Captain Kennedy hoped to procure horses for their further journey. The road is picturesque, but the scenes around, and many of its passengers, wore the same disconcerted European aspect:—

"Comfortable farm-houses, with stables and offices, have been erected, gardens and fields enclosed, and roads made, connecting the farms with the highway; European ploughs and implements are seen in the fields, with carts and wagons, made after the national pattern of the French, German, or Spanish proprietor. Herds of cattle, and numerous flocks of sheep grazing on the hill-sides, are pleasing evidences of present prosperity."

It is consolatory to find the Spaniard spoken of as an industrious colonist. Captain Kennedy fell in, too, with Maltese pedlars and Rhinelanders.

The uniform of the soldiers is most picturesque—very large wide trousers of red cloth fastened to the knee, strong leather leggings, laced at the side from the knee to the ankle, shoes, and white gaiters; the jacket is of blue cloth, edged with red, and an arabesque pattern of the same color on either breast; the waistcoat is of the same material, and having no opening in the front, is either slipped on over the head or buttoned at the side; both jacket and waistcoat are cut low, without collars, leaving the neck bare; a blue sash is wound several times round the waist, and the head-dress is a crimson cap, with blue tassel, and a long handkerchief twisted and converted into a turban."

Bleedah, when reached, is, like Algiers, beginning to assume a Frenchified appearance; the native population is frightfully wasted by the warfare. The looked-for horses proved anything rather than such steeds as figure well in either sketch or tale—wretched, rat-like creatures, miserably accoutred. The tourists, however, started, under conduct of a jolly guide. The scenery of the land improved as they rode on:—

"With the aid of gunpowder, a rough track has been made close to the river, [Cheeffa,] at present just wide enough to form a horse road, but which, when completed, will be a monument of engineering skill that will bear comparison with the Alpine roads of Europe. If the country continues quiet, it will be finished in about two years. On either hand rise the perpendicular sides of the mountains worn by the action of the water into a thousand fantastic shapes—huge masses of rock fringed with the luxuriant vegetation that springs from every fissure. Each spot, each little ravine that retains sufficient earth, is green with the wild

laurei, the juniper, the dwarf oak, and the olive, with here and there some tree of a larger growth that has withstood the storm, firmly planted in its more sheltered nook. The Oleander flourishes on each little gravelly bed by the side of the river, and a variety of shrubs and flowering plants, with a profusion of lavender in full bloom, grow on every vacant spot. At our feet the river, slightly swollen and distorted by the melting snow, rushed, as it were, painfully through its contracted bed, foaming around the misshapen masses that, detached from the rocks above, impede but cannot check its course. Nor do the highest summits of the Atlas omit to send their tribute to add to the beauty of the scenery. Countless streams pour down their sides, and reaching the edge of the valley, fall in cascades from rock to rock till they join the river. At one point of view, where the rocks are steepest and the vegetation most beautiful, five are visible at once. The finest falls from a precipice of 300 feet, leaping from ledge to ledge, here and there for a moment concealed among the underwood, appearing and reappearing broken into a hundred streamlets that trickle over the mossy surface of the rocks, like threads of silver, until, again united by some broader ledge, they together seek the stream beneath. At noon, a halt of an hour was made, to feed our horses and ourselves; the morning, which had been dull and threatening rain, had given place to a fine afternoon, bright though cold; another half hour's ride carried us out of the valley of the Cheeffa, we having forded the river thirteen times since crossing it in the morning.

"The real ascent of the lesser Atlas now commenced; the road, which had hitherto followed the course of the running water, now became a winding path cut in the face of the mountain through brushwood and dwarfed trees rarely exceeding ten feet in height. At the southern entrance of the valley we passed a solitary farmhouse, and near it, several limestone quarries that had been opened by the French; the lime seemed of an excellent quality. The strata on the banks of the river had consisted almost entirely of clay slate, and as we ascended, were replaced by a coarse-grained sandstone containing a quantity of fossil shells. After surmounting the first ascent, we crossed an extensive plateau covered

with cattle and goats, grazing under the charge of a couple of Arab boys; several uninclosed patches of cultivated ground were also seen at intervals. Another hill rising before us, still remained to be climbed; and although not very steep, the road was bad.

"When once on the summit, we were well repaid by the magnificent prospect. Taking a retrospective glance over our two days' journey, east and west nothing was to be seen, save mountain beyond mountain, as far as the eye could reach; to the southward, looking through the gap formed by the Cheeffa, was the broad plain of the Meteedjah, bounded by the hills to the westward of Algiers; and beyond all the dimly defined horizon of the Mediterranean. From hence a short descent brought us into Medeah, where we arrived at half-past three o'clock, our horses not very tired, having carried us the nine leagues much better than could have been supposed from their wretched appearance at starting."

Arrived at Medeah, in spite of its now containing a comfortable French inn, "mirrors and all," there could be no longer much mistake as to the quarter of the globe.

When visiting the French officer in command, General Marey, our travellers were introduced to a household favorite of its kind, as peculiar as Prince Puckler Muskau's Abyssinian:—

"In a few minutes the door opened and the lion entered the room, the man only leading him by a tuft of his mane. He was a magnificent animal, two years old, and full grown, all but his mane, which, although only a foot long, made, nevertheless, a respectable appearance; he did not seem to care about our strangers, but walking about the room like a large dog, permitted us to take liberties with him, such as patting him, shaking his paw, and making him exhibit his teeth and claws. He showed, however, a marked predilection in favor of his old acquaintances, and lying down before them, turned on his back to be scratched. After a scratch or two, he began to yawn, and was fairly settling himself for a nap, when a segar was puffed in his face—a proceeding he evidently did not approve of.—Rising in a hurry, curling his lips, and wrinkling his nose he exposed to view a splendid set of teeth—a sure sign that he was not pleased. A hearty sneeze seemed to restore him to



good temper; and bearing no malice, he returned a friendly pat, bestowed upon him by Captain Martenot, who had been the aggressor, by rubbing his head caressingly against his knees."

After finishing their first day's march towards the Little Desert, while the Arabs were arranging the tent, the tourists managed to bag sundry red-legged partridges, three hares, some rabbits, and a snipe.

Cooks, and those interested in purveying, may like to know what "the gentlemen" had for supper:—

"The Kaïd, taking the two enormous dishes of couscousoo from the women who had brought them up from the foot of the hill, where they had been prepared, placed them himself before us. Couscousoo, the national dish of Northern Africa, is prepared as follows. Flour is wetted, kneaded into a sort of paste, half dried in the sun, and then granulated by rubbing between the hands; placed again in the sun, the grains become hard, and when kept in a dry place, remain good for years. When wanted for use it is cooked in the following manner. A large vessel containing water at the bottom, and the meat to be dressed, whatever it may be, is placed on the fire; over this, half way up, is fixed a perforated plate, on which the couscousoo is placed, mixed with pepper, spices, vegetables, &c., according to taste and means—sometimes being quite plain; the pot is then covered, and the steam ascending through the holes in the division, confined also by the lid, dresses the couscousoo, which, when sufficiently done, is turned out into a flattish wooden bowl, with a central leg a foot and a half high. The meat boiled at the bottom is torn into pieces and strewn over the top, often with a handful of soft sugar; the broth is generally thrown away, except a portion, which, mixed with milk, sugar, honey, or butter, is poured into the middle, when the guests have taken their places and are ready to begin; cold milk alone is, however, often used for this purpose. Asking the Kaïd to sit down and eat with us, two parties were formed, one round each dish, and rudely cut wooden spoons, made somewhat after the fashion of a child's spade, being furnished to each person, a series of holes dug to the bottom of the dish soon showed, by their breadth and depth, that the couscousoo was as good as our appetites."

The next station was the fort of Boghar,

the point whence the tribes of the Little Desert could be most conveniently visited. It is a strong position, apparently a picturesque locality, and with the benefit of a healthy climate. On the plain beneath, by the bank of the Cheeleeff, a fair is held in the autumn. To this—

"The wandering Bedoueens from the desert bring the produce of their herds and flocks, exchanging hides, cheese, butter, and wool, together with dates, skins of wild beasts, ostrich feathers, &c., received from the interior, and the woollen manufactures of the Arab women, for corn, honey, oil, and the few articles of European merchandise they value, such as cutlery and cotton cloths, the sale of arms and ammunition, formerly the principal objects of traffic, having been prohibited by the French. Horses are also sold, and a valuable animal may be picked up by chance. This annual fair is of great value to the French Government, as it enables them to collect the tribute which otherwise they could not do from the more distant tribes."

The immediate object of the travellers' visit in this direction, was the dahias (or lakes) of the Little Desert:—

"Dates and milk were brought for our breakfast; and at seven o'clock we set out at a smart canter, accompanied by Ben-Aouda's brother and five or six Arabs; the former was mounted on a handsome mare, his bridle and saddle, beautifully embroidered in gold, and ornamented with thin silver plates, contrasted somewhat oddly with a rather dirty white bernous, as did also his bare legs and feet with a pair of gilt stirrups. Passing several other douars and large herds of camels, &c., a ride of seven miles over the plain, brought us to the nearest of the lakes. Nearly dry in summer, in winter and spring they are of some considerable extent, though shallow, and at these seasons covered with innumerable flocks of wild fowl of every description. We visited four, situated within a short distance of each other, the largest about two miles in length and half a mile in breadth, and the smallest, which appeared to be deeper than the others, hardly two hundred yards in diameter. At the upper end of the largest dahia we found a numerous flock of flamingoes, wading in the shallow water, and marching gravely about like so many soldiers in a white and red uniform. They were too wary to let us

come within shot, and the banks of the lake not affording the cover of even a stunted bush, we were obliged to content ourselves with watching their manœuvres, and when alarmed at our nearer approach, they rose screaming into the air, their long necks extending in front, and legs stretched out behind, gave them the appearance of sticks borne along by enormous wings at a rapid rate.

### JUVENILE DEPARTMENT.

#### MORAVIAN MISSIONS IN GREENLAND.

The first missionary to the cold country of Greenland was Hans Egede. Frederick IV., King of Denmark, paid money for his support. He preached for fifteen years, and yet none of the Greenlanders believed. In 1731, Frederic IV. died, and Christian VI., the next king, said that it was of no use to pay for the mission any longer. Then Hans Egede thought he must give up and go home.

The Moravians about the time of Hans Egede, had been so persecuted, that only six hundred were left. These fled for their lives, and were kindly welcomed by Count Zinzendorf in Lusatia. They settled on his estates, and called the place Herrnhut. Soon after, they began to think of sending the gospel to the heathen.

Among these poor people were two young brothers, Matthew and Christian Stack. They heard of Hans Egede and his trials. They could not bear to think of the poor Greenlanders being left without a missionary. They had no money and no friends who were rich enough to help them, but they set off to Hamburg on foot to find out a way to go.

The citizens of Hamburg thought them foolish, but the young men did not mind being scoffed at. They saw the King's Chamberlain, and he asked them how they thought they should get a living in Greenland. They said, "We will build a house, and cultivate the ground." "But," said he, "you will find no wood to build with, only barren rocks." "Then," said these noble-spirited young men, "we will dig a hole in the earth, and lodge there." "No," said the Chamberlain, "you shall not come to that. Here are fifty dollars for you to buy timber, to take with you to build a house." Other people gave money, they bought food,

timber, tools, seeds, furniture and books, and on the 10th of April, 1733, set sail for Greenland. A good old Moravian brother, named Christian David, went with them to see them settled. Egede and his sons set to work to teach them the language. They had two languages to learn; first, that of Egede, which was different from theirs, and then that of the Greenlanders. The poor wicked Greenlanders often made the trouble greater by stealing their papers.

In 1734 two more missionaries, Frederick Boehnisch and John Beck, arrived in Greenland, and in 1736 Christian David and Christian Stack returned to Copenhagen. This year, 1736, the missionaries were very nearly starved. Their friends at Herrnhut did not know of their distress, and their friends at court had forgotten them. They had only a little oatmeal left, and they were so hungry that they had to eat it with old tallow candles and train oil. They would have been glad to have bought seals, but the hard-hearted Greenlanders would not sell them. Once they saw the Greenlanders eat eleven seals at a feast, and they would not give them a morsel. They could not go out fishing for themselves, for they grew too weak to manage the boat. They were once five days without food. One day they found an eagle's nest, shot the bird and took the eggs. At last a ship arrived with provisions, and with it, (oh what a pleasant surprise!) came Matthew Stack's mother and his two dear sisters. They had come to keep house for the missionaries, and to teach the Greenland women.

The Greenlanders tried the patience of the missionaries. Sometimes they would do all they could to tempt their teachers to wickedness. When they could not succeed in that, they would mimic their reading and singing and praying, and try to make them ridiculous. Sometimes they would dance and drum and bellow and try to stun them with noise. When they could not make them angry in this way, they would pelt them with stones. Once, in the night time, they came round the tent of the missionaries with naked knives to kill them.

In spite of all their trials these faithful missionaries began the year 1738 with a resolution to persevere. One day, as John Beck was writing a translation of the gospels; the savages came and begged to hear part of his book. John talked to



them earnestly, and read them the history of the death of Jesus. Then one of them, named Kajarnack, stepped up to the table, and said, with a loud, earnest and affecting voice, "How was that? Tell me that once more, for I would fain be saved too." Oh, how these words, from the mouth of a Greenlander, went to the missionary's heart! Tears of joy rolled down his cheeks, and he repeated to them again the whole story.

Kajarnack did not forget what he had heard. He often came to be taught. Then he said he would go to his tent, and tell his family, especially his little son, of these wonderful things. He persuaded three families of Greenlanders to come and be taught also; and when the missionaries could not find the words they wanted, he would help them in the fullness of his heart. After a time he and his family were baptized. He was named Samuel, his wife Anna, his son Matthew, and his daughter Hannah. Other Greenlanders were converted; a school for the little Greenlanders was begun, and morning and evening the people were collected together to sing hymns, and to learn the word of God.

Those who despised and derided the missionaries came to ask pardon. Those who once would not listen, stood along the shores as the missionaries passed by, entreating them to land, and to tell them the words of God.

One of the missionaries happening to go out one morning very early, heard very sweet singing in a tent. The father and his family were all at morning prayer. The missionary listened, and tears of joy stood in his eyes. "What a change," thought he, "has been wrought here! These people were, but two years ago, savage heathen, and now they are singing of their own accord so sweetly to the Lamb once slain."

Matthew Kajarnack died in 1752. With his last breath he talked of Jesus and his dying love. He said, "I love our Savior exceedingly. I am very glad that I shall soon go to him. Will not you come too?" He kissed the missionary's hand and said, "I love you much." His breath now failed: he opened his eyes once more, looked around, and began to sing, but could not go on. His Christian friends took up the sweet hymn, and as they sang, his spirit gently fled.

The Christian Greenlanders learned to write letters to one another. Here is a part of a letter from a Greenland boy to the son of one of the missionaries, who was at that time at school in Europe.

"My dear little Jacob:—I salute thee much in my heart because I know that thou lovest me. Even so I much love thee. I received thy letter, and when I read it, it rejoiced me. I think every day and every hour on our Savior's wounds, sufferings and death, and I pray to him that he would give me new grace, and warm my heart. When I am alone, or wherever I am, he is continually near my heart, and makes me joyful. When I think how much he has suffered for me, then I do not know what returns to make him for what he has done for me. I desire from my heart to live to his joy. Worthy of praise is the Savior's great love.

"I am, E—  
"To my dear brother Jacob, in the European land."

Years passed away, and the pleasures of the missionaries increased. One of those who were in Greenland in 1818, speaking of the Christmas meeting, says: "How happy is such a life spent among a flock of true children of God, and lovers of the Lord Jesus Christ, collected from among wild and barbarous heathen! How willingly do we give up many outward advantages enjoyed by those living in other countries, while we partake of the real blessedness of the house of God, in such a family of Jesus, who have been brought by the Spirit of God out of heathenish darkness into the light of his countenance. I landed upon Greenland ground thirty-seven years ago; and gladly would I serve my Lord and Savior, if he required and enabled me so to do, thirty-seven years more, to have any share of the grace and mercy, which he thus richly bestows upon this congregation of converted Greenlanders; and as my dear wife is entirely of the same mind with me, we both wish to spend and be spent in this happy place."

More than a hundred years have gone by since Matthew Stack and his brethren landed in Greenland. The little church they planted yet lives and flourishes; and every year brings pleasant letters from the happy Greenlanders, and their no less happy missionaries.—*Missionary Stories.*

## POETRY.

## THE BIBLE.

This little book I'd rather own,  
 Than all the gold and gems  
 That e'er in monarch's coffers shone,  
 Than all their diadems.  
 Nay, were the seas one chrysolite,  
 The earth a golden ball,  
 And diamonds all the stars of night,  
 This book were worth them all.

How hateful to ambition's eye  
 His blood-wrung spoils must gleam,  
 When Death's uplifted hand is nigh,  
 His life a vanished dream.  
 Then hear him with his gasping breath  
 For one poor moment crave:  
 Fool! would'st thou stay the arm of Death  
 Ask of thy gold to save?

No, no! the soul ne'er found relief  
 In glittering hoards of wealth,  
 Gems dazzle not the eye of grief,  
 Gold cannot purchase health;  
 But here a blessed balm appears  
 To heal the deepest woe;  
 And he who seeks this book in tears,  
 His tears shall cease to flow.

Here He who died on Calvary's tree,  
 Hath made the promise blest;  
 "Ye weary laden come to me,  
 And I will give you rest.  
 A bruised reed I will not break,  
 A contrite heart despise;  
 My burden's light, and all who take  
 My yoke will reach the skies."

Yes, yes, this little book is worth  
 All else to mortals given;  
 For what are all the joys of earth,  
 Compared with joys of Heaven?  
 This is the guide our Father gave,  
 To lead to realms of day;  
 A star whose lustre gilds the grave—  
 The light—the truth—the way.

William Leggett.

*St. Lawrence and Atlantic Railroad.*—Mr. Morton, the engineer, addressed a report to Mr. George Moffat of Montreal, President of this Company, on the 29th ult., in which he states that the length of the railroad, from Portland to Maine, will be 280 miles, of which 130 are in Canada—that the cost may be eight millions of dollars—that passenger trains would pass between Montreal and Portland in 10 hours—that the largest class of freight engines would be able to transport 200 tons over the road either way—that there are no steep grades nor abrupt curvatures—that half the road will be a dead level, or only inclined 8 or 10 feet per

mile—that the road will connect the St. Lawrence and Atlantic at a point where the New England coast approaches nearest to the Western waters—that having Montreal at one end and Portland at the other, each with a capacious harbor and rich country, it must be profitable—and that it is the shortest channel through which the trade of a great part of the Valley of the St. Lawrence can reach the sea board.

## ENIGMA, No. 16.

I am composed of 21 letters.

My 1, 4, 3, 10, 17, is a gulf in Europe.

My 2, 7, 6, 3, 21, 4, a cape of Tripoli.

My 3, 21, 3, 2, 7, a town of Independant Tartary.

My 4, 2, 12, 15, 14, a town of the Mogul's Empire.

My 5, 2, 3, 20, 10, a river in England.

My 6, 4, 2, 16, 11, 17, a town in Hungary.

My 7, 5, 18, 4, 17, a chain of Mountains in Africa.

My 8, 19, 15, 17, 3, 6, 11, 15, 21, a county in Virginia.

My 9, 20, 21, 12, 17, a river in Asia.

My 10, 11, 3, 17, 7, 6, 17, one of the Japan Islands.

My 11, 1, 3, 3, a county in Illinois.

My 12, 8, 14, 7, a river in Russia.

My 13, 11, 12, 21, 12, 20, a town in France.

My 14, 18, 13, 7, 15, 11, 16, 17, one of the U. States.

My 15, 3, 17, a river in Norway.

My 16, 4, a town in Candia.

My 18, 14, 6, 7, 2, 7, 17, a river in Chile.

My 17, 17, 10, 16, a town in Italy.

My 20, 19, 13, 4, one of the Moluccas.

My 21, 17, 1, 11, an island in the Baltic.

My whole is the name of an island of the Western Continent.

MARTIN F. ZUTWILER,  
*Seven Islands, Va.*

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